

## HISTORIC AMERICAN ENGINEERING RECORD

## MASTER PROJECT RECORD

OH-6

Detroit-Superior High Level Bridge (1914-1917)  
.5 miles west of the Public Square  
Cleveland  
Cuyahoga County  
Ohio

NOTE ON PHOTOGRAPHS: All photographs were taken by John T. "Jet" Lowe during the summer of 1978.

- OH-6-1 View, looking east, of the deck of the bridge taken from the intersection of w. 25th Street and Detroit Avenue. The bridge connects the city's east and west side over the Cuyahoga River Valley. Photograph illustrates the flared approaches designed to accommodate an open well, through which streetcars could enter the bridge's lower level. This plan was later abandoned after construction had already begun, in favor of short subways that would carry the streetcars west beneath Detroit Avenue for a distance of 725 feet and south beneath W. 25th St. for a distance of 560 feet.
- OH-6-2 View of pier #3, West approach, Detroit Superior High Level bridge (1914-1917). Pier #3 and #4 support the steel rive span. They are 116 feet by 80 feet at the base and rest on stiff blue clay 45 feet below the surface of the river. Cast-steel bolsters of the three-hinge steel arch are anchored by structural steel grillage to the masonry piers.
- OH-6-3 View looking east of 591 foot steel arch of bridge. Arch consists of Pratt trusses divided into twenty-four, 24 foot, 7 inch panels. It was fabricated by the King Iron Bridge Company of Cleveland whose circular plaque can be seen where the arch meets the roadway. The steel arch was erected by the Berro construction Co. of Chicago.

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Detroit Superior High Level bridge  
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- OH-6-4 View looking east of lower streetcar deck of concrete approach spans. The lower deck was designed to carry six street railway tracks; only four were ever installed. The lower deck had a vertical clearance of 15 feet.
- OH-6-5 View looking west of bridge spans. Each reinforced concrete arch of the approach spans (12 in all) consist of four arch ribs, as this photograph illustrates.
- OH-6-6 View looking east of north elevation. IN the foreground is the ornamental wrought iron railing of the old Superior Avenue Viaduct.
- OH-6-7 View showing reinforced concrete arch, east approach. The 591 foot three-hinge steel arch that spans the Cuyahoga River is flanked by twelve such approach arches. Each concrete arch consists of four arch ribs, which support the beam and slab streetcar deck on spandrel columns. As the photograph illustrates, the spandrel columns continue above the lower deck to support the roadway.
- OH-6-8 View looking east of lower streetcar deck of 591 foot steel arch. Photograph shows the construction of the upper roadway. The streetcar level was abandoned in 1954. The subway wells were sealed the following year.
- OH-6-9 View of bridge looking west. A fund-raising marathon is in progress. The traffic levels outside the main arch were added in 1965 when the bridge underwent extensive rehabilitation.

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## OH-6 (continued)

Detroit Superior High Level Bridge, 1912-1917

Photocopies OH-6-10 through OH-6-22 made by Score Photographers, Cleveland, Ohio, 1978.

- OH-6-10 copy of a construction progress photograph taken by the Hunkin-Conkey Construction Company, dated October 25, 1916. Photo shows the reinforced concrete subway deck as it appeared shortly after construction. A portion of arch number 12, can be see. Photo courtesy of Cleveland Public Library.
- OH-6-11 Short subways led to the lower deck of the Detroit-Superior Bridge. Street cars entered the subways through open wells located in the center of the roadways. This undated photograph shows the Superior Avenue entrance. The view is looking west. Photograph courtesy Office of the Cuyahoga County Engineer in Cleveland, Ohio.
- OH-6-12 Subway station, Detroit Superior Bridge. Copy of a photograph dated August 15, 1939, courtesy the Cleveland Press, Cleveland, Ohio. Subway platform pictured was entered by a stairwell at the southeast corner of Detroit Avenue and W. 25th Street.
- OH-6-13 A streetcar crosses the Cuyahoga River in the waning days of Cleveland's trolley age. Copy of photograph taken by Herbert H. Harwood, Jr., Baltimore, Maryland, photo courtesy Mr. Harwood
- OH-6-14 Southeast end of Detroit-Superior bridge. Eastbound Madison Avenue streetcar. copy of a photograph taken by Herbert H. Harwood, Jr., January 1954. Photo courtesy Herbert H. Harwood, Baltimore, MD.
- OH-6-15 Copy of drawing showing general plan and elevation (July 12, 1912; revised Feb. 20, 1914). Drawing courtesy Office of the Cuyahoga County Engineer, Cleveland, Ohio.
- OH-6-16 West approach and arch number three dated Apr. 22, 1913. Drawing courtesy Office of the Cuyahoga County Engineer, Cleveland, OH.
- OH-6-17 West approach to bridge showing arch number 1 and typical cross section (Apr. 3, 1913). Drawing courtesy office of the Cuyahoga County Engineer, Cleveland, Ohio.

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### Detroit-Superior High Level Bridge, 1912-1917

- OH-6-18 Detroit Superior Bridge, Foundation for west pier of river span, dated 2/4/14. Drawing courtesy Office of the Cuyahoga County Engineer, Cleveland, Ohio.
- OH-6-19 Stress sheet for the river span dated 7/13/12; revised Oct. 18 and 21, 1912. Drawing courtesy Office of the Cuyahoga County Engineer, Cleveland, Ohio.
- OH-6-20 Drawing of lower deck plan, west approach dated August 7, 1916. Drawing courtesy Office of the Cuyahoga county Engineer, Cleveland, Ohio.
- OH-6-21 Upper deck plan, west approach to bridge dated 7/25/16. Photograph courtesy Office of the Cuyahoga County Engineer, Cleveland, Ohio.
- OH-6-22 General arrangement and details of Shelter house over ramp at W. 25th St. and Detroit Ave., dated 1-20-17; revised 5-25-17.). Drawing courtesy Office of the Cuyahoga County Engineer, Cleveland, Ohio.

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All color xerographic copies were made from a duplicate color transparency. OH-6-1 through OH-6-25 were previously transmitted to the Library of Congress.

Note: Photographer, Jet Lowe

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OH-6-27 (CT)      OBLIQUE VIEW

OH-6-28 (CT)      OBLIQUE VIEW